



Main

Range	TeSys
Product name	TeSys U
Device short name	LUB
Product or component type	Non reversing power base
Device application	Motor control Motor protection
Poles description	3P
Suitability for isolation	Yes
[Ue] rated operational voltage	690 V AC for power circuit
Network frequency	40...60 Hz
[Ith] conventional free air thermal current	32 A
[Ie] rated operational current	28.5 A at <= 440 V 23 A at 500 V 21 A at 690 V
Utilisation category	AC-43 AC-44 AC-41
[Ics] rated service breaking capacity	50 kA at 230 V 50 kA at 440 V 10 kA at 500 V 4 kA at 690 V
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	type linked contacts (1 NO + 1 NC) conforming to IEC 60947-4-1 type mirror contact (1 NC) conforming to IEC 60947-1
[Uc] control circuit voltage	24 V AC 50/60 Hz 24 V DC 48...72 V AC 50/60 Hz 48...72 V DC 110...240 V AC 50/60 Hz 110...220 V DC

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Complementary

Typical current consumption	<p>200 mA at 24 V DC I maximum while closing with LUCM</p> <p>220 mA at 24 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>220 mA at 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>25 mA at 110...220 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>25 mA at 110...240 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>280 mA at 110...220 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>280 mA at 110...240 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>280 mA at 48...72 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>280 mA at 48...72 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD</p> <p>45 mA at 48...72 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>45 mA at 48...72 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>75 mA at 24 V DC I rms sealed with LUCM</p> <p>80 mA at 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD</p> <p>90 mA at 24 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD</p>
Heat dissipation	<p>3 W for control circuit with LUCA, LUCB, LUCC, LUCD</p> <p>1.8 W for control circuit with LUCM</p>
Safety reliability level	<p>B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1</p> <p>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1</p>
Operating time	<p>35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM for control circuit</p> <p>50 ms at ≥ 72 V closing with LUCA, LUCB, LUCC, LUCD for control circuit</p> <p>60 ms at 48 V closing with LUCA, LUCB, LUCC, LUCD for control circuit</p> <p>70 ms at 24 V closing with LUCA, LUCB, LUCC, LUCD for control circuit</p> <p>65 ms closing with LUCM for control circuit</p>
Mechanical durability	15 Mcycles
Maximum operating rate	3600 cyc/h
Product certifications	<p>CE</p> <p>UL</p> <p>CSA</p> <p>CCC</p> <p>EAC</p> <p>ASEFA</p> <p>ATEX</p> <p>Marine</p>
Standards	<p>EN 60947-6-2</p> <p>IEC 60947-6-2</p> <p>UL 60947-4-1, with phase barrier</p> <p>CSA C22.2 No 60947-4-1, with phase barrier</p>
[Ui] rated insulation voltage	<p>690 V conforming to IEC 60947-6-2 (pollution degree 3)</p> <p>600 V conforming to UL 60947-4-1</p> <p>600 V conforming to CSA C22.2 No 60947-4-1</p>
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-6-2
Safe separation of circuit	<p>400 V SELV between the control and auxiliary circuits conforming to IEC 60947-1 appendix N</p> <p>400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-1 appendix N</p>
Fixing mode	<p>Clipped (DIN rail)</p> <p>Screw-fixed (plate)</p>
Connections - terminals	<p>Control circuit: screw clamp terminals 1 cable(s) 0.34...1.5 mm² flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 cable(s) 0.75...1.5 mm² flexible without cable end</p> <p>Control circuit: screw clamp terminals 1 cable(s) 0.75...1.5 mm² rigid</p> <p>Control circuit: screw clamp terminals 2 cable(s) 0.34...1.5 mm² flexible with cable end</p> <p>Control circuit: screw clamp terminals 2 cable(s) 0.75...1.5 mm² flexible without cable end</p> <p>Control circuit: screw clamp terminals 2 cable(s) 0.75...1.5 mm² rigid</p> <p>Power circuit: screw clamp terminals 1 cable(s) 1...10 mm² rigid</p> <p>Power circuit: screw clamp terminals 1 cable(s) 1...6 mm² flexible with cable end</p> <p>Power circuit: screw clamp terminals 1 cable(s) 2.5...10 mm² flexible without cable end</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1...6 mm² flexible with cable end</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1...6 mm² rigid</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1.5...6 mm² flexible without cable end</p>
Tightening torque	<p>Control circuit: 0.8...1.2 N.m flat screwdriver 5 mm</p> <p>Control circuit: 0.8...1.2 N.m Philips no 1 screwdriver 5 mm</p> <p>Power circuit: 1.9...2.5 N.m flat screwdriver 6 mm</p> <p>Power circuit: 1.9...2.5 N.m Philips No 2 screwdriver 6 mm</p>
Width	45 mm
Height	154 mm
Depth	126 mm

Net weight	0.9 kg
Compatibility code	LUB

Environment

IP degree of protection	IP20 conforming to IEC 60947-1 (front panel and wired terminals) IP20 conforming to IEC 60947-1 (other faces) IP40 conforming to IEC 60947-1 (front panel outside connection zone)
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	-25...60 °C with LUCM -25...70 °C with LUCA, LUCB, LUCC, LUCD
Ambient air temperature for storage	-40...85 °C
Fire resistance	960 °C parts supporting live components conforming to IEC 60695-2-12 650 °C conforming to IEC 60695-2-12
Operating altitude	2000 m
Shock resistance	10 gn power poles open conforming to IEC 60068-2-27 15 gn power poles closed conforming to IEC 60068-2-27
Vibration resistance	2 gn (f= 5...300 Hz) power poles open conforming to IEC 60068-2-27 4 gn (f= 5...300 Hz) power poles closed conforming to IEC 60068-2-27
Resistance to electrostatic discharge	8 kV level 3 in open air conforming to IEC 61000-4-2 8 kV level 4 on contact conforming to IEC 61000-4-2
Resistance to radiated fields	10 V/m 3 conforming to IEC 61000-4-3
Resistance to fast transients	2 kV class 3 serial link conforming to IEC 61000-4-4 4 kV class 4 all circuits except for serial link conforming to IEC 61000-4-4
Non-dissipating shock wave	1 kV serial mode 24...240 V AC conforming to IEC 60947-6-2 1 kV serial mode 48...220 V DC conforming to IEC 60947-6-2 2 kV common mode 24...240 V AC conforming to IEC 60947-6-2 2 kV common mode 48...220 V DC conforming to IEC 60947-6-2
Immunity to radioelectric fields	10 V conforming to IEC 61000-4-6
Immunity to microbreaks	3 ms for control circuit
Immunity to voltage dips	70 % / 500 ms conforming to IEC 61000-4-11

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	848 g
Package 1 Height	5.2 cm
Package 1 width	14.5 cm
Package 1 Length	17 cm
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Weight	8.921 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Weight	79.868 kg
Package 3 Height	80 cm
Package 3 width	80 cm
Package 3 Length	60 cm

Offer Sustainability

Sustainable offer status	Green Premium product
RECh Regulation	RECh Declaration
EU RoHS Directive	Compliant

[EU RoHS Declaration](#)

Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes